

ADAPTIVE SEEK CONTROL FOR MAXIMUM PERFORMANCE
WITH MINIMAL FILTER CORRUPTION

Abstract of the Disclosure

5 By dynamically adjusting the maximum voice coil motor driving current produced by
an amplifier in a disc drive, amplifier saturation may be reduced, while still maintaining
optimal current to quickly drive the voice coil motor during seek operations. Reducing disc
drive saturation, and thus non-linearities in the driving current, increases notch filter
performance. As the notch filter is used in the disc drive to remove frequencies from the driving
10 current that tend to cause or excite the mechanical oscillations in the disc drive, increased notch
filter performance reduces mechanical oscillations and improves disc drive noise characteristics.